30. (New) An apparatus for analyzing network activity, the apparatus comprising:

a packet capturing module, for accessing the packets traversing a network, the packets having source and destination addresses of network devices exclusive of the apparatus, and for filtering the packets to produce packet data, wherein the packet capturing module produces the packet data by accessing a predetermined address, comparing the predetermined address to the source and destination addresses for a current packet, and retaining the current packet when one of the source and destination addresses for the current packet matches the predetermined address;

a packet analyzing module, in communication with the packet capturing module, for producing decoded packet data and for producing transaction data from the decoded packet data; and

a data management module, in communication with the packet capturing module and the packet analyzing module, for analyzing at least one of the packet data and the transaction data to provide an indication of network usage.

31. (New) An apparatus for analyzing network activity, the apparatus comprising:

a packet capturing module, for accessing the packets traversing a network, the packets having source and destination addresses of network devices exclusive of the apparatus, and for filtering the packets to produce packet data, wherein the packet capturing module produces the packet data by retrieving a predetermined port address, comparing the predetermined port address to a source port address for a current packet, comparing the predetermined port address to a destination port address for the current packet, and retaining

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the current packet when one of the source and destination port addresses for the current packet matches the predetermined port address;

10   a packet analyzing module, in communication with the packet capturing module, for producing decoded packet data, wherein the decoded packet data includes a plurality of patterns of packets, and for producing transaction data from the decoded packet data, wherein the transaction data is derived from a time value for identifying a substantially optimal collection of patterns of packets indicative of transaction occurrences; and

15   a data management module, in communication with the packet capturing module and the packet analyzing module, for analyzing the packet data and the transaction data to provide an indication of network usage.

32.   (New) An apparatus for analyzing network activity, the apparatus comprising:

         a packet capturing module, for accessing the packets traversing a network, the packets having source and destination addresses other than an address corresponding to the apparatus, and for filtering the packets to produce raw packet data, wherein the packet capturing module

5   produces the raw packet data by accessing a predetermined port address, comparing the predetermined port address to a source port address for a current packet, comparing the predetermined port address to a destination port address for the current packet, and retaining the current packet when one of the source and destination port addresses for the current packet matches the predetermined port address;

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10   a packet analyzing module, in communication with the packet capturing module, for

producing decoded packet data and for producing transaction data from the decoded packet

data; and

   a data management module, in communication with the packet capturing module and

the packet analyzing module, for analyzing at least one of the raw packet data, the decoded

15 packet data, and the transaction data to provide an indication of network usage.

   33. (New) An apparatus for analyzing network activity, the apparatus

     comprising:

   a packet capturing module, for accessing a plurality of packets traversing a network,

the packets having source and destination addresses of network devices exclusive of the

5 apparatus, and for filtering the packets to produce packet data;

   a packet analyzing module , in communication with the packet capturing module, for

producing decoded packet data and for producing transaction data from the decoded packet

data, the packet decoding module comprising (a) and (b) following:

   (a) a packet decoder, for accessing the packet data and producing the decoded

10 packet data by searching in text of the packet data for one or more key words; and

   (b) a decoded packet recompiler, in communication with the packet decoder, for

accessing the decoded packet data, segregating the packets from the decoded packet data into

separate transactions between nodes by ordering according to thread and a time interval,

sequencing the packets corresponding to each separate transaction by identifying a packet

15 position in a pattern corresponding to each separate transaction, and linking together the data

in each separate transaction when the identified positions are determined to produce the transaction data, wherein the transaction data is derived from a time value and identifies a collection of the patterns of packets that is substantially optimal for identifying transaction instances; and

20   a data management module, in communication with the packet capturing module and the packet analyzing module, for analyzing the packet data and the transaction data to provide an indication of network usage.

34.   (New)   An apparatus for analyzing network activity, the apparatus comprising:

a packet capturing module, for accessing packets traversing a network, the packets having source and destination addresses of network devices exclusive of the apparatus, and

5   for filtering the packets to produce packet data;

a packet analyzing module, in communication with the packet capturing module, for producing decoded packet data and for producing transaction data from the decoded packet data, the packet analyzing module comprising:

a packet decoder, for accessing the packet data and producing the decoded packet

10   data; and

a decoded packet recompiler, in communication with the packet decoder, for accessing the decoded packet data, segregating the packets from the decoded packet data into separate transactions between nodes, sequencing the packets corresponding to each separate

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transaction, and linking together the data in each separate transaction to produce the

15   transaction data; and

a data management module, in communication with the packet capturing module and

the packet analyzing module, for analyzing at least one of the packet data and the transaction

data to provide an indication of network usage.

35.   (New)   For use with a network activity analyzer capable of being coupled

to a network transmission medium, a method of analyzing network activity, the method

comprising:

accessing packets traversing the network, the packets having source and destination

5   addresses of network devices exclusive of the network activity analyzer;

filtering the packets to produce packet data by (a) through (c) following:

(a) accessing a predetermined address;

(b) comparing the predetermined address to the source and destination

addresses for a current packet; and

10   (c) retaining the current packet when one of the source and destination

addresses for the current packet matches the predetermined address;

producing decoded packet data, wherein the decoded packet data includes a plurality

of patterns of packets;

producing transaction data from the decoded packet data, wherein the transaction data

15   is derived from a time value and identifies a substantially optimal collection of patterns of

packets indicative of transaction instances; and

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analyzing the packet data and the transaction data to provide an indication of network usage.

36. (New) For use with a network activity analyzer capable of being coupled to a network transmission medium, a method of analyzing network activity, the method comprising:

accessing packets traversing the network, the packets having source and destination

5 addresses of network devices exclusive of the network activity analyzer;

filtering the packets to produce raw packet data by (a) through (c) following:

(a) accessing a predetermined address;

(b) comparing the predetermined address to the source and destination addresses for a current packet; and

10 (c) retaining the current packet when one of the source and destination addresses for the current packet matches the predetermined address;

producing decoded packet data;

producing transaction data from the decoded packet data; and

analyzing the decoded packet data and the transaction data to provide an indication

15 of network usage.

37. (New) For use with a network activity analyzer capable of being coupled to a network transmission medium, a method of analyzing network activity, the method comprising:

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accessing packets traversing the network, the packets having source and destination

5   addresses of network devices exclusive of the network activity analyzer;

filtering the packets to produce packet data by: (a) accessing a predetermined port

address; (b) comparing the predetermined port address to source and destination port

addresses for a current packet; and (c) retaining the current packet when one of the source

and destination port addresses for the current packet matches the predetermined port address;

10   producing decoded packet data, wherein the decoded packet data includes a plurality

of patterns of packets;

producing transaction data from the decoded packet data, wherein the transaction data

is derived from a time value for identifying a substantially optimal collection of patterns of

packets indicative of transaction occurrences; and

15   analyzing the packet data and the transaction data to provide an indication of network

usage.

38.   (New)   For use with a network activity analyzer capable of being coupled

to a network transmission medium, a method of analyzing network activity, the method

comprising:

accessing packets traversing the network, the packets having source and destination

5   addresses of network devices other than an address corresponding to the network activity

analyzer;

filtering the packets to produce raw packet data by: accessing a predetermined port

address; comparing the predetermined port address to source and destination port addresses

for a current packet; and retaining the current packet when one of the source and destination

10   port addresses for the current packet matches the predetermined port address;

producing decoded packet data;

producing transaction data from the decoded packet data; and

analyzing at least one of the decoded packet data and the transaction data to provide

an indication of network usage.

39.   (New)   For use with a network activity analyzer capable of being coupled to

a network transmission medium, a method of analyzing network activity, the method

comprising:

accessing packets traversing the network, the packets having source and destination

5   addresses of network devices exclusive of the network activity analyzer;

filtering the packets to produce packet data;

producing decoded packet data by searching in text of the packet data for one or more

key words;

producing transaction data from the decoded packet data by (a) accessing the decoded

10   packet data; (b) segregating the packets from the decoded packet data into separate

transactions between nodes of the network by ordering according to thread and a time

interval; (c) sequencing the packets corresponding to each separate transaction by identifying

a packet position in a pattern corresponding to each separate transaction; and (d) linking

together the data in each separate transaction when the identified positions are determined to

15   produce the transaction data, wherein the transaction data is derived from a time value and

identifies a collection of the patterns that is substantially optimal for identifying transaction instances; and

analyzing the packet data and the transaction data to provide an indication of network usage.

40.　(New)　For use with a network activity analyzer capable of being coupled to a network transmission medium, a method of analyzing network activity, the method comprising:

accessing packets traversing the network, the packets having source and destination

5　addresses other than an address corresponding to the network activity analyzer;

filtering the packets to produce raw packet data;

producing decoded packet data;

producing transaction data from the decoded packet data by accessing the decoded packet data; segregating the packets from the decoded packet data into separate transactions

10　between nodes of the network, sequencing the packets corresponding to each separate transaction; and linking together the data in each separate transaction to produce the transaction data; and

analyzing at least one of the raw packet data, the decoded packet data, and the transaction data to provide an indication of network usage.

41.   (New) For use with a network activity analyzer capable of being coupled to

a network transmission medium, a method of analyzing network activity, the method

comprising;

accessing packets traversing the network, the packets having source and destination

5   addresses of devices exclusive of the activity analyzer;

filtering the packets to produce packet data;

producing decoded packet data by searching in text of the packet data for one or more

key words;

producing transaction data from the decoded packet data by accessing the decoded

10   packet data; segregating the packets from the decoded packet data into separate transactions

between nodes by ordering according to thread and a time interval; sequencing the packets

corresponding to each separate transaction by identifying a packet position in a pattern

corresponding to each separate transaction; and linking together the data in each separate

transaction when the identified positions are determined to produce the transaction data,

15   wherein the transaction data is derived from a time value and identifies a collection of the

patterns that is substantially optimal for identifying transaction instances; and

producing translated transaction data from the transaction data wherein the translated

transaction data includes response data aggregated according to a fixed time interval; and

analyzing the packet data and the transaction data to provide an indication of network

20   usage.

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42.   (New) For use with a network activity analyzer capable of being coupled to

a network transmission medium, a method of analyzing network activity, the method

comprising;

accessing packets traversing the network, the packets having source and destination

5   addresses of devices exclusive of the activity analyzer;

filtering the packets to produce packet data;

producing decoded packet data;

producing transaction data from the decoded packet data by accessing the decoded

packet data; segregating the packets from the decoded packet data into separate transactions

10   between nodes; sequencing the packets corresponding to each separate transaction; and

linking together the data in each separate transaction;

producing translated transaction data from the transaction data; and

analyzing the packet data and the transaction data to provide an indication of network

usage.

43.   (New) An apparatus for analyzing network activity, the apparatus comprising:

means for accessing packets traversing the network, the packets having source and

destination addresses of devices exclusive of the network activity analyzer;

means for filtering the packets to produce packet data, wherein the means for filtering

5   the packets to produce packet data includes routines for retrieving a predetermined address;

comparing the predetermined address to the source and destination addresses for a current

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packet; and retaining the current packet when one of the source and destination addresses for

the current packet matches the predetermined address;

means for producing decoded packet data, wherein the decoded packet data includes

10   a plurality of patterns of packets;

means for producing transaction data from the decoded packet data, wherein the

transaction data is derived from a time value for identifying a substantially optimal collection

of patterns of packets indicative of transaction instances; and

means for analyzing the packet data and the transaction data to provide an indication

15   of network usage.

44.   (New) An apparatus for analyzing network activity, the apparatus comprising:

means for accessing packets traversing the network, the packets having source and

destination addresses of devices exclusive of the network activity analyzer;

means for filtering the packets to produce packet data, wherein the means for filtering

5   the packets to produce packet data includes routines for retrieving a predetermined address;

comparing the predetermined address to the source and destination addresses for a current

packet; and retaining the current packet when one of the source and destination addresses for

the current packet matches the predetermined address;

means for producing decoded packet data;

10   means for producing transaction data from the decoded packet data; and

means for analyzing the packet data and the transaction data to provide an indication

of network usage.

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45.   (New) An apparatus for analyzing network activity, the apparatus comprising:

means for accessing packets traversing the network, the packets having source and destination addresses for network devices exclusive of the network activity analyzer;

means for filtering the packets to produce packet data, wherein the means for filtering

5   the packets to produce packet data includes routines for accessing a predetermined port address; comparing the predetermined port address to a source port address for a current packet; comparing the predetermined port address to a destination port address for the current packet; and retaining the current packet when one of the source and destination port addresses for the current packet matches the predetermined port address;

10   means for producing decoded packet data, wherein the decoded packet data includes a plurality of patterns of packets;

means for producing transaction data from the decoded packet data, wherein the transaction data is derived from a time value for identifying a substantially optimal collection of packets indicative of transaction occurrences; and

15   means for analyzing the packet data and the transaction data to provide an indication of network usage.

46.   (New) An apparatus for analyzing network activity, the apparatus comprising:

means for accessing packets traversing the network, the packets having source and destination addresses for network devices other than an address corresponding to the network activity analyzer;

means for filtering the packets to produce raw packet data, wherein the means for filtering the packets to produce raw packet data includes routines for retrieving a predetermined port address; comparing the predetermined port address to a source port address for a current packet; comparing the predetermined port address to a destination port address for the current packet; and retaining the current packet when one of the source and destination port addresses for the current packet matches the predetermined port address;

means for producing decoded packet data;

means for producing transaction data from the decoded packet data; and

means for analyzing at least one of the decoded packet data and the transaction data to provide an indication of network usage.

47.   (New) An apparatus for analyzing network activity, the apparatus comprising;

means for accessing packets traversing the network, the packets having source and destination addresses other than an address corresponding to the network activity analyzer;

means for filtering the packets to produce packet data;

means for producing decoded packet data by searching in text of the packet data for one or more key words;

means for producing transaction data from the decoded packet data, wherein the means for producing transaction data includes routines for accessing the decoded packet data; segregating the packets from the decoded packet data into separate transactions between nodes by ordering according to thread and a time interval; sequencing the packets corresponding to each separate transaction by identifying a packet position in a pattern

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corresponding to each separate transaction; and linking together the data in each separate transaction when the identified positions are determined to produce the transaction data, wherein the transaction data is derived from a time value and identifies a collection of the

15   patterns that is substantially optimal for identifying transaction instances; and

means for analyzing the packet data and the transaction data to provide an indication of network usage.

48.   (New) An apparatus for analyzing network activity, the apparatus comprising;

means for accessing packets traversing the network, the packets having source and destination addresses other than an address corresponding to the network activity analyzer;

means for filtering the packets to produce raw packet data;

5   means for producing decoded packet data;

means for producing transaction data from the decoded packet data, wherein the means for producing transaction data includes routines for accessing the decoded packet data; segregating the packets from the decoded packet data into separate transactions between nodes; sequencing the packets corresponding to each separate transaction; and linking

10   together the data in each separate transaction to produce the transaction data; and

means for analyzing the decoded packet data and the transaction data to provide an indication of network usage.

REMARKS

Claims 29 through 48 are substantially copied from U.S. Patent No. 5,787,253 granted July 28, 1998 to McCreery, et al. and assigned to the A.G. Group in accordance with